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PRE-APPEAL BRIEF REQUEST FOR REVI	Docket Number (Optional) 1032/0108PUS1		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number 10/591,198		Filed 30 Aug 2006
on	First Named Inventor		
Typed or printed name	Art Unit 1793	1 -	ixaminer IN, KUANG Y
Applicant requests review of the final rejection in the aborilled with this request.	ve-identified a	application. No	amendments are being
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the a Note: No more than five (5) pages may be provided	ttached sheef I.	t(s).	
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applicant/inventor.  assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		Martin R. Go	Signature eissler or printed name
x attorney or agent of record.  Registration number _51011		1.703.621	.7140
attorney or agent acting under 37 CFR 1.34.		•	phone number
Registration number if acting under 37 CFR 1.34.	July 10, 2009 — Date		
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
*Total of forms are submitted.			

This collection of Information is required by 35 U.S.C. 132. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mall Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): GROEZINGER

Confirmation No. 7398

Application No.: 10/591,198

Art Unit: 1793

Filed: 30 Aug 2006

Title: WATER-SOLUBLE SALT CORES

Examiner: LIN, KUANG Y

Attorney Docket No.: 1032/0108PUS1

**Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

## STATEMENT IN SUPPORT OF REQUEST FOR PRE-APPEAL BRIEF REVIEW

Dear Sir:

Claims 1, 2 and 4-7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over SU 1196096 in view of Halpern. Claim 1 recites, inter alia, water soluble salt cores manufactured by compacting a mixture of water soluble salts and binder under pressure and by subsequently subjecting the compacted mixture to a thermal treatment. The binder is an inorganic phosphate or a mixture of inorganic phosphates, and the binder further includes between approximately 1 and 10% by weight of a parting agent comprising graphite.

SU 1196096 discloses a water-soluble salt core that uses a phosphate binder. However, SU 1196096 does not disclose or suggest the use of graphite in the phosphate binder. Halpern discloses a sand-based core with a resin binder. Halpern indicates that graphite may be added to this sand and resin system. The examiner argues that one skilled in the art would have found it obvious to add graphite to the salt and phosphate composition of SU 1196096 because graphite is used in a sand and

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resin composition. However, the record contains to reason for making this modification to SU 1196096. The examiner has merely identified the presence of graphite in an unrelated molding process and asserted without any explanation that it would be obvious to include it in a different process in order to "facilitate the foundry process." Such conclusory statements do not constitute a prima facie case of obviousness, and claim 1 is submitted to be allowable for at least this reason.

MGIP

It is respectfully submitted that the problems involved in forming cores from sand are different than those that occur when soluble cores are used. For example, one skilled in the relevant art might expect a parting agent to be useful in Halpern to reduce the adhesion of the sand to the molded product. This might be said to "facilitate the foundry process." However, because sand is not disclosed in SU 1196096 and the core in that reference is soluble, it is not clear how graphite could facilitate the foundry process in SU 1196096. There is thus no reason to add graphite to SU 1196096. The examiner has not addressed the differences between the process of SU 1196096 and Halpern, has not explained what benefit one would expect to obtain by adding graphite to SU 1196096, has not provided a cogent reason for adding graphite to SU 1196096 and has not presented a prima facie case of obviousness. Claim 1 is submitted to be allowable for at least this reason.

Claims 2 and 4-7 depend from claim 1 and are submitted to be allowable for at least the same reasons as claim 1.

Claim 1 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Anderko in view of Melling and further in view of Halpern. The examiner combines Anderko and Melling to suggest that a salt core can have a phosphate binder. The

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examiner then argues that graphite should be added to a salt and phosphate core because graphite is used in Halpern's sand and resin core. However, this rejection suffers from the same deficiencies as the above rejection based on SU 1196096 and Halpern. Specifically, the examiner has provided no reason for adding graphite to a salt and phosphate core. Neither sand nor resin is present in a salt and phosphate core, and the record does not suggest that any benefit would be obtained by adding graphite to a salt and phosphate core. The conclusory statement "to facilitate the foundry process" does not cure this problem. A prima facie case of obviousness has not been

Claims 2 and 4-7 depend from claim 1 and are submitted to be allowable for at least the same reasons as claim 1.

presented in connection with claim 1, and claim 1 is submitted to be allowable for at

Date: July 10, 2009

least this reason.

Respectfully Submitted,

Martin R. Geissler

Attorney/Agent for Applicant(s)

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